U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Metal Bank of America State Road - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #3**
Progress
Metal Bank of America State Road
A3DE
Philadelphia, PA
Latitude: 40.0203300 Longitude: -75.0389500

To: Ragesh Patel, DEP
Gerald Heston, EPA
Response Center RRC, EPA
Response Center RRC, EPA

From: Michael Towle, On-Scene Coordinator
Date: 10/20/2015
Reporting Period: 10/10/2015 through 10/17/2015

1. Introduction

1.1 Background

Site Number:	A3DE	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	9/28/2011
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	9/28/2015	**Start Date:**	4/20/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

This Site is the location of a release of hazardous substances into soil which has subsequently migrated into a combined sewer system allowing hazardous substances to migrate from the Site and into the nearby Delaware River.

1.1.2 Site Description

The Site includes an area of soil contaminated by polychlorinated biphenyls (PCBs) now covered by asphalt. A combined storm and sanitary sewer system (drainage system) underlies the Site and exists within the area of contaminated soil. PCBs have been detected in the liquids and solids within the drainage system at concentrations which indicate that PCBs are migrating from the soil at the Site and

then into the drainage system.

1.1.2.1 Location

The Site is located along State Road in the City of Philadelphia, Pennsylvania. The Site is located immediately northeast of the intersection of State Road and Knorr Street.

1.1.2.2 Description of Threat

PCBs release from the soil at the Site and into the combined storm and sanitary sewer that courses under the Site. The contaminated drainage either migrates to the POTW or, in high flow periods, to the Delaware River. PCBs are known to bioaccumulate in fatty tissue and pose a threat to those consuming fish removed from the Delaware River. See Action Memo dated September 28, 2011 for a more thorough description of the Site threats.

Based upon the results of a removal site evaluation, the OSC proposed and EPA Region III selected a Removal Action intending to reduce the off-site migration of PCBs from the Site. An Action Memorandum was signed September 28, 2011 selecting the installation of a liner system inside the drainage in order to minimize the migration of PCBs from the soil into the combined sewer and then off-site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In 2008, sampling activities conducted by EPA at the Site confirmed the presence of PCBs and other organic compounds in the soils beneath the asphalt. The other organic compounds including numerous chlorinated benzene compounds (e.g., trichlorobenzene), 2-butanone, and methylene chloride were detected in more limited volumes of soils at the Site while PCBs were detected throughout the Site.

The highest concentration of PCBs (320 mg/kg) was detected in the soils between approximately 2 and 10 feet below the ground surface at a location where elevated concentrations of several chlorinated benzene compounds (e.g., trichlorobenzene (500 mg/kg)) were also detected. Commonly, certain electrical transformer fluids containing PCBs also contained chlorinated benzene compounds such as trichlorobenzene to reduce the viscosity of the PCBs. The organic solvent 2-butanone (a/k/a methyl ethyl ketone) was also detected at concentrations up to 29 mg/kg in these same soils.

The detection of PCBs, chlorinated benzenes, and 2-butanone in the same soils at depths extending to the water table (at approximately 10 feet) indicates that organic compounds in the soil may be facilitating the transport of PCBs into deeper soils and soils lying within the area ground water. Additionally, PCBs have been found within the waters migrating through the drainage system at the Site. The above information indicates that the PCBs have migrated from the surface where they were likely released and are migrating uncontrolled in the environment.

On November 2, 2010, the OSC and Remedial Project Manager evaluated the Site. The asphalt cover was observed to have been recently repaired (as evidenced by tarry coatings over the vegetation growing within cracks in the asphalt surface). Areas of previously ponded or pooled water were evident by the appearance of rings (similar to bathtub rings) or marks left at the water line of pooled water areas. The OSC has observed ponded or pooled water at the Site. The OSC verified that the asphalt had been cracked or repaired in areas of ponded or pooled water.

On February 11, 2011, the OSC met at the Site with representatives of the Philadelphia Water Department (PWD) which operates and maintains a drainage system beneath the surface of the Site through which both sanitary and storm flows in the area of the Site migrate. Available maps indicate that the drainage system underlies the Site, exists in the area within which PCBs are located, exists at a depth which is below the water table, and is constructed of brick. The Site location with the highest PCB, chlorinated benzene, and 2-butanone concentrations in the soil is located alongside the drainage system. The PWD suggested to the OSC that a brick sewer drainage system such as that underlying the Site normally accepts storm flows and infiltration of underground water such as groundwater. The drainage system would normally accept all flows in the industrial area destined for treatment or discharge to the Delaware River. Normally flow is directed to treatment works operated by the City of Philadelphia. During high flow conditions such as storm events, the excess flow is directed, by design, to the Delaware River.

On April 27, 2011, water and sediment within the drainage system were collected and sent for laboratory analysis. Water was collected from locations upstream, within (beneath the surface of), and downstream of the Site. Sediment was also collected if it was present. The analytical results indicate that PCBs are likely entering the drainage system from the Site; PCBs in the flow within the drainage system were detected at a concentration of 0.005 ug/L upstream of the Site and at a higher concentration of 6.69 ug/L downstream of the Site. Sediment concentrations of approximately 6.4 mg/kg (total PCB) were detected in sediment within the drainage system at a location within the Site. PCB aroclor 1254 was the only aroclor detected at a level less than 1 mg/kg in the solids within the drainage system.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The bulk of the scope of the Removal Action will be accomplished by PADOT pursuant to an Administrative Settlement Agreement entered between EPA and PADOT on April 20, 2015. Under the Agreement, PADOT and its contractors will arrange for the cleaning of the drainage system (combined storm water and sanitary water system) underlying and coursing through the Site and the subsequent installation of a liner system within. The liner system will prevent infiltration into the drainage system of potentially contaminated liquids originating from within the PCBs-contaminated soils at the Site.

See prior POLREPs for a summary descriptions of previous actions.

The EPA OSC will conduct oversight of the actions.

There are 4 key manhole locations to be discussed:

#1 - Longshore Street (upgradient to Site)

#2 - onsite location in upgradient position

#3 - onsite location in downgradient position

#4 - Knorr Street (downgradient to Site)

The drainage system makes a bend under the Site between the #2 and #3 manhole positions. A large lateral enters the main drainage in the bend.

2.1.2 Response Actions to Date

Between October 10 and 13, 2015, PADOT contractors completed final activities relating to preparations for lining. The sewer was rinsed underlying the Site to be sure that the conditions were suitable for installation of the liner. The manhole covers and a portion of the cone (portion between the manhole cover and actual drainage tube) were removed from the Longshore and Knorr Street locations (first manholes outside the Site boundary). This manhole excavation activity was necessary to allow suitable access for the lining system. The resulting excavations were covered by steel plates pending actual lining work. All equipment necessary for the lining work was mobilized and prepared.

The pump-around system was activated to reduce the flow of liquids into the work area. Flow was pumped from an area upgradient to the work area and then discharged into an alternate sewer system on Disston Street. An inflatable plug was installed upgradient to the Longshore work location to prevent liquids from entering the work area. The Philadelphia Water Department had notified users to minimize sanitary flows to the extent practicable.

On October 13th, the segment between Longshore and the center of the Site (located on a curve in the drainage system between Site manholes #2 and #3) was videotaped and determined to be ready for

lining action.

On the morning of October 14th, traffic along State Road in front of the Site was restricted to allow for lining equipment to be correctly positioned atop the Longshore Street manhole. The CIPP liner inversion was then successfully conducted between the Longshore manhole location and the center of the Site. The liner passed through onsite manhole #2 and then stopped at a location in the bend in the drainage system and influent from a large lateral. The heating and curing process occurred throughout the night of 10/14 and then the necessary lateral openings and cuts were made on 10/15. Additionally, the remaining sewer segment was videotaped to assure that it was ready for lining activity.

On the morning of October 16, 2015, Knorr Street was blocked to allow for lining equipment to be correctly positioned atop the Knorr Street manhole. The CIPP liner inversion was then successfully conducted between the Knorr Street manhole location and the center of the Site (where the first liner segment was ended). The heating and curing process occurred throughout the night of 10/16 and then the necessary lateral openings and cuts were made on 10/17/15.

At the conclusion of the day of 10/17/15, the sewer system coursing through the Metal Bank Site was successfully lined.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

There are several responsible parties relating to this Site and EPA enforcement personnel have sent notice letters and are keeping these PRPs informed. The PRP Group has sent a representative to the Site to observe all activities. The OSC will inform Regional counsel of ongoing activity. The OSC also coordinates with a representative of the Site owner. EPA anticipates working with the PRP Group relating to the completion of the removal action.

EPA and PADOT entered into an Administrative Settlement Agreement on April 20, 2015. Under the Agreement, PADOT would install a liner in the existing combined system. This liner would be installed in such a way to reduce the potential for infiltration of liquids into the drainage system as it coursed under the Site and through the contaminated soils. The PADOT work will satisfy a large portion of the selected response action.

2.1.4 Progress Metrics

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***

2.2 Planning Section

2.2.1 Anticipated Activities

Several work items remain to be accomplished:

Lining of the manhole cones for the 2 onsite manhole locations to assure a complete seal from penetration by potentially contaminated Site liquids.

Replacement of the 2 onsite manhole covers to assure integrity of the new drainage system.

Abandonment of the sewer lateral located at the bend between manhole locations #2 and #3. This action will minimize the potential for potentially contaminated site liquids to migrate to offsite locations (the lateral connects the main sewer system underlying the Site with the sewer that runs down Disston Street adjacent to the Site.

Removal of waste in 2 rolloff containers.

Demobilization.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

The OSC is responsible for opening and closing access onto the Site per agreement with the owner.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

A Special Account is set up for this Site with monies derived from potential responsible parties. Entities conducting response work at the Site are eligible for reimbursement from the account. The OSC is monitoring the work to assure effort is consistent with the Agreement and the Action Memorandum. As such, the construction activity may be reimburseable from the Special Account.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.